

## Power distribution system in a vehicle

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**Classification:**

- international: B60R16/03; B60K25/00; B60L15/20; H02J7/14; B60R16/02; B60R16/03; B60K25/00; B60L15/20; H02J7/14; B60R16/02; (IPC1-7): H02J7/14; G06F13/10

- European: B60K25/00; B60L15/20E; H02J7/14F

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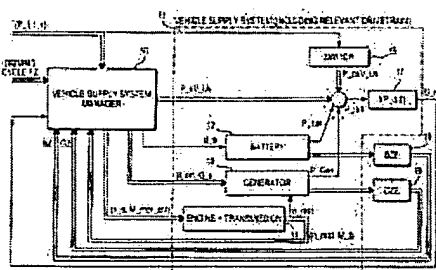
**Cited documents:**

US4402288 (A)  
US4553516 (A)  
US5077516 (A)  
US5200900 (A)  
US5402007 (A)

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### Abstract of US 6208931 (B1)

The apparatus for energy distribution in a motor vehicle includes a vehicle electrical power supply system (11) with a generator (13) regulated by a voltage regulator (21), a battery (12) and consumers and a control arrangement (10) receiving required information from the power supply system for determining control parameters for engine or power supply system components. The control arrangement (10) includes the voltage regulator (21) and a supply system managing device (20). The supply system managing device (20) includes a device (24) for establishing an energy management strategy and a pre-control device (23) for generating a differential output for input to the device (24) according to an actual power and required power with respect to reference voltage. The pre-control device (23) and the device (24) for establishing an energy management strategy cooperate to determine a power supply set voltage ( $U_s$ ) from the required information. The power supply set voltage ( $U_s$ ) is compared with a measured actual voltage ( $U_{ist}$ ) to produce a comparison results and the voltage regulator (21) regulates the generator according to the comparison result.



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**Power distribution device for motor vehicles****Publication number:** JP2001505847 (T)**Publication date:** 2001-05-08**Inventor(s):****Applicant(s):****Classification:**

- international: B60R16/03; B60K25/00; B60L15/20; H02J7/14; B60R16/02;  
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(IPC1-7): B60R16/02; H02J7/14

- European: B60K25/00; B60L15/20E; H02J7/14F

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DE19745849 (A1)

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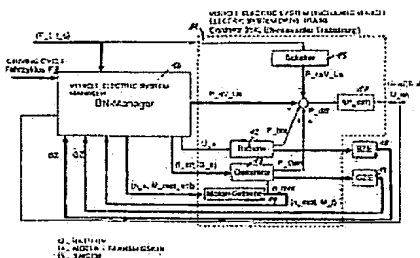
EP0944946 (B1)

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Abstract not available for JP 2001505847 (T)

Abstract of corresponding document: **DE 19745849 (A1)**

The device has a generator which is driven by the engine and supplies an on-board network with at least one battery and a number of loads. A controller (10) receives information from the network and engine required to determine the control and/or regulation parameters for corresponding network and engine components. The controller performs power management and distributes power between the network and engine according to defined requirements and taking into account the condition that the desired network voltage ( $U_s$ ) lies within defined limits.



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